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SANITARY ADVICE FOR KEEPERS OF SUMMER RESORTS.

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Until comparatively recent years if a keeper of a summer resort provided good housing and feeding facilities, suitable and proper social diversions, and a reasonable amount of rest and quiet, the keeper of the resort considered that he had done his duty well, and other things being equal was reasonably sure that he would have a fair return for his investment and effort. While all of these points are of no mean weight in the minds of persons who go to the seashore, the mountains, or the country to avoid the heat and discomforts of the city, they have become secondary, and the question which is now asked first of all is as to the healthfulness of the resort in question. Aside from the financial loss which the manager of a summer pleasure ground may sustain from an outbreak of sickness among his guests, there is a moral obligation to protect and further as far as possible their health interests.

In a general way it may be stated that disease is carried from the sick to the well, either directly by persons or indirectly by food and drink, dust, and insects. If the avenues for disease germs are closed there need be comparatively little disease. It is thus seen that most disease is environmental, and it is therefore the duty of persons who are in charge of summer resorts to maintain the environment of their guests in as healthful a condition as possible.

The great source of disease in a summer resort is the toilet. In many localities it is of the most primitive pattern, and maintained in a condition of noisome filth which would not be tolerated under any other circumstances. Frequently it is merely a surface privy, to which the barnyard fowls and domestic animals have free access. Again there may be a pit privy, or a cesspool which drains into the well, or into the stream which furnishes the water for the establishment.

Inasmuch as typhoid fever, a disease which by preference spends the warm months at a summer resort, is caused by a germ which is peculiar to man, and which leaves the body of the sick patient in his discharges, it may be seen that any method of disposing of human excrement which does not absolutely insure that it will not be carried to well persons is faulty, not to say criminal. After the germ of typhoid fever has left the body of the sick patient in his discharges, it is carried to well persons in food or drink, or through the intermediation of flies or dirty fingers.

It is the duty of every keeper of a summer resort to provide clean, well-screened places of easement for his guests, and to see to it that the fecal material deposited in this place can not escape and find entrance into the food and drink of the guest. If there is a cesspool, or a pit, it must not leak, and it must be guarded against flies, because these insects, which are bred in filth and lead a life of sin and iniquity, carry the germs on their feet to the food stuffs in the kitchen or dining room, thus delivering the germs in a live and virulent condition to well people.

The selection of a water supply is of the utmost importance. It should not be from a stream which receives the drainage of human habitations. In this connection it may be remarked that the old theory of the self-purification of streams has been exploded. If well water is used, it should not be from a shallow surface well, nor should it be from a well which by any chance may receive the drainage of human dwellings. Other things being equal, driven or artesian wells are far preferable.

If there is any doubt as to the purity of the water, it should be sterilized, either by boiling or by the addition of calcium hypochlorite prior to using.

Mention has been made of the carriage of the germs of typhoid fever by dirty fingers. This does not necessarily mean fingers which are mechanically dirty. It has been found in recent years that a large number of persons who have had typhoid fever continue to pass the germs of that disease in their discharges for a considerable period after their recovery from the disease. These persons are called typhoid carriers. It is of course an impossibility for the manager of a summer resort to examine all of his employees to determine whether or not they may be carriers, but it is his duty, when selecting persons who are to be employed in the preparation and serving of food or cleaning the dishes and kitchen utensils, to inquire whether or not they have had typhoid fever recently, and to employ none who have been afflicted with that disease within three or four months.

It has been shown that flies carry disease. The model summer resort has no flies. This condition of affairs may be brought about by preventing their breeding, and by screening the hostelry against them. Flies breed in manure. Therefore the barnyard or stables should be kept scrupulously clean, and the manure stored in well-screened metal-lined bins. The stable itself should also be screened. This adds not only to the comfort of the guests, but also saves the horses and cattle a great deal of energy, which would otherwise be expended in fighting flies.

One of the things which city people most desire when going to the country is milk. Milk which is produced by dirty cows in a dirty stable, and secured and handled by dirty dairy hands, is unfit for human consumption. The best advertisement that any country resort can have is a clean, airy, wholesome dairy, in which clean cows are milked by clean laborers, and in which the processes to which the milk is subjected follow a cleanliness of levitical scrupulosity.

It has been recommended that all of the buildings of a summer resort be screened. This not only excludes flies, but it also prevents the entrance of mosquitoes. Aside from the fact that these insects act as the producers of insomnia and irritating inflammations, they are also the purveyors of malaria, which they introduce into the system of the guests by biting them. While it is desirable that they be excluded, it is even more necessary that they be prevented from breeding. Most summer resort keepers breed their own mosquitoes, and a careful survey of the premises will discover small pools of water, unscreened rain-water barrels, and small collections of water in tin cans, flower pots, and other easily overlooked small receptacles, all of which may contain "wigglers," which are the immature forms of mosquitoes. If these are emptied or oiled, or have a considerable quantity of salt placed in them, they will cease to be producers. In fountains and ornamental pools, to which none of these methods may be applied, the planting of small fish will destroy the mosquito larvæ, and thus prevent their multiplication.

The careful tuberculosis patient may be quite harmless in a summer hotel, but those who are careless and expectorate promiscuously are a positive danger, and while such persons are always to be regarded with consideration and charity, it may become necessary to recommend that they spend their summer in a sanitarium, rather than in a public resort where they may endanger others.

There are two sorts of vermin which may be disease carriers, and with which the summer resort keeper is at constant war; these are the rat and the cockroach.

Rats stay where they can get food. Therefore if all food supplies intended for human beings, and all remnants of human food, be guarded against them their numbers will fall off considerably. Furthermore, if stables are maintained in a cleanly condition, and if the rats are excluded from feed rooms, they will find that they must move on or be starved to death. Those which remain may be killed off, either by poisoning with some reliable agent, such as phosphorus or arsenic paste. Traps will take off a good many, and a good active terrier makes an excellent agent for the extermination of these pests.

Cockroaches may be gotten rid of by starvation, that is, the protection of foodstuffs against them, absolute cleanliness, or by the use of some agent which kills cockroaches but is harmless to man. Borax mixed with sugar has been recommended for this purpose.

Finally let it be stated that if the keeper of a summer resort has any doubt as to the sanitary condition of his premises, or if he is brought face to face with any sanitary problem with which he does not know how to deal, it is his duty to consult the local health officer.